

WHAT IS CLAIMED IS:

1. An inverter driving apparatus for driving a plurality of lamp units, each lamp unit including at least one lamp, the apparatus comprising:

5 a plurality of inverter boards for generating driving signals for driving respective lamp units based on a control signal and a voltage signal,

wherein the plurality of inverter boards are connected in series and include a first outer inverter board receiving the control signal and a second outer inverter board located opposite the first outer inverter board receiving the voltage signal, and each of the plurality of inverter boards transmits the control signal or the voltage signal to at
10 least one of the plurality of inverter boards adjacent thereto.

2. The apparatus of claim 1, wherein the at least one lamp of each lamp unit comprises a plurality of lamps connected in parallel.

3. The apparatus of claim 1, wherein the serial connection between the inverter boards is made along a direction perpendicular to a length direction of the at least one
15 lamp.

4. The apparatus of claim 1, wherein each of the plurality of inverter boards comprises two connectors for signal transmission of the control signal and the voltage signal.

5. The apparatus of claim 4, wherein each connector has a plurality of pins, and
20 the pins of adjacent two of the connectors are arranged in opposite order.

6. The apparatus of claim 5, wherein the two connectors of each of the plurality of inverter boards comprises a first connector for receiving the control signal and transmitting the voltage signal and a second connector for receiving the voltage signal and transmitting the control signal.

25 7. The apparatus of claim 5, wherein each of the plurality of inverter boards further comprises a plurality of electrical members electrically connected to the connectors for generating the driving signal.

8. The apparatus of claim 5, wherein each of the plurality of inverter boards further comprises a plurality of wires for interconnecting the two connectors included
30 therein.

9. The apparatus of claim 4, wherein each connector has a plurality of pins, and the pins of the two connectors in each of the plurality of inverter boards are arranged in opposite order.

10. The apparatus of claim 9, wherein the pins of adjacent two connectors in adjacent two of the plurality of inverter boards are arranged in opposite order.

11. The apparatus of claim 1, wherein the first outer inverter board comprises a first connector for receiving the control signal and a second connector for receiving the voltage signal from and transmitting the control signal to another of the plurality of inverter boards.

12. The apparatus of claim 1, wherein the second outer inverter board comprises a first connector for receiving the voltage signal and a second connector for receiving the control signal from and transmitting the voltage signal to another of the plurality of inverter boards.

13. The apparatus of claim 1, wherein the plurality of inverter boards further comprises an intermediate inverter board connected to the first outer inverter board, the intermediate inverter board comprising a first connector for receiving the control signal from and transmitting the voltage signal to the first outer inverter board and a second connector for receiving the voltage signal from and transmitting the control signal to another of the plurality of inverter boards.

14. The apparatus of claim 1, wherein the plurality of inverter boards further comprises an intermediate inverter board connected to the second outer inverter board, the intermediate inverter board comprising a first connector for receiving the control signal from and transmitting the voltage signal to another of the plurality of inverter boards and a second connector for receiving the voltage signal from and transmitting the control signal to the second outer inverter board.

15. A liquid crystal display comprising:

a liquid crystal panel assembly including a plurality of gate lines, a plurality of data lines, and a plurality of pixels connected to the gate lines and the data lines;

a gate driving circuit for driving the gate lines;

a data driving circuit for driving the data lines;

a plurality of lamp units including a plurality of lamps illuminating the panel assembly;

a system board for generating image signals, first control signals for controlling the image signals, and a voltage signal for driving the lamps;

5 a control board for processing the image signals from the system board based on the first control signals from the system board, generating second control signals for controlling the processed image signals and a third control signal for driving the lamps, and providing the processed image signals and the second control signals for the driving circuits; and

10 a plurality of inverter boards connected in series for generating driving signals for driving the lamps based on the third control signal from the control board and the voltage signal from the system board.

16. The liquid crystal display of claim 15, wherein each inverter board transmits the third control signal or the voltage control signal to at least one of inverter boards adjacent thereto.

15 17. The liquid crystal display of claim 16, wherein a transmission path of the third control signal is opposite a transmission path of the voltage signal.

18. The liquid crystal display of claim 15, wherein each lamp unit comprises a plurality of lamps connected in parallel.

20 19. The liquid crystal display of claim 15, wherein the serial connection between the inverter boards is made along a direction perpendicular to a length direction of the lamps.

20. The liquid crystal display of claim 15, wherein each of the plurality of inverter boards comprises two connectors for signal transmission of the third control signal and the voltage signal.

25 21. The liquid crystal display of claim 20, wherein each connector has a plurality of pins, and the pins of adjacent two of the connectors are arranged in opposite order.

22. The liquid crystal display of claim 21, wherein the two connectors of each of the plurality of inverter boards comprises a first connector for receiving the third control signal and transmitting the voltage signal and a second connector for receiving the voltage signal and transmitting the third control signal.

30 23. The liquid crystal display of claim 21, wherein each inverter board further comprises a plurality of electrical members electrically connected to the connectors for generating the driving signal.

24. The liquid crystal display of claim 21, wherein each inverter board further comprises a plurality of wires for interconnecting the two connectors included therein.

25. The liquid crystal display of claim 15, wherein each lamp unit has first and second terminals connected to corresponding one of the inverter boards, the first
5 terminal is grounded, and the second terminal is supplied with a predetermined voltage.

26. The liquid crystal display of claim 25, wherein each inverter board is closer to the second terminal of the corresponding lamp unit than to the first terminal thereof.

27. The liquid crystal display of claim 15, wherein each lamp unit has first and
10 second terminals supplied with positive and negative voltages, respectively.

28. The liquid crystal display of claim 27, wherein each inverter board is located near the center of the corresponding lamp unit.

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